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09/126,897 07/31/1998 JEAN-PIERRE WEBER 003250-198	9422
UNITED STATES OF THE STATES OF	
21839 7590 07/16/2002	
BURNS DOANE SWECKER & MATHIS L L P EXAMINER	ER
POST OFFICE BOX 1404 ALEXANDRIA, VA 22313-1404 BURD, KEVIN M	MICHAEL
ART UNIT	PAPER NUMBER
2631	
DATE MAILED: 07/16/2002	

Please find below and/or attached an Office communication concerning this application or proceeding.

Ne

Application No.

Applicant(s)

Office Action Summary

09/126,897

Examiner

Kevin M. Burd

Art Unit 2631

WEBER ET AL

The state of the s	
	ears on the cover sheet with the correspondence address
Period for Reply	25T TO EVENE
A SHORTENED STATUTORY PERIOD FOR REPLY IS STATE MAILING DATE OF THIS COMMUNICATION.	SET TO EXPIRE3 MONTH(S) FROM
- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the
mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply with	
 If NO period for reply is specified above, the maximum statutory period will a Failure to reply within the set or extended period for reply will, by statute, ca 	pply and will expire SIX (6) MONTHS from the mailing date of this communication. use the application to become ABANDONED (35 U.S.C. § 133).
 Any reply received by the Office later than three months after the mailing dat earned patent term adjustment. See 37 CFR 1.704(b). 	e of this communication, even if timely filed, may reduce any
Status	
1) 🔀 Responsive to communication(s) filed on May 1	7, 2002
2a) ✓ This action is FINAL . 2b) ✓ This	action is non-final.
3) Since this application is in condition for allowant closed in accordance with the practice under Ex	ce except for formal matters, prosecution as to the merits is a parte Quayle, 1935 C.D. 11; 453 O.G. 213.
Disposition of Claims	
4) X Claim(s) 28-42	is/are pending in the application.
4a) Of the above, claim(s)	is/are withdrawn from consideration.
5) Claim(s)	is/are allowed.
6) 💢 Claim(s) <u>28-42</u>	is/are rejected.
7)	is/are objected to.
8)	are subject to restriction and/or election requirement.
Application Papers	
9) The specification is objected to by the Examine	r.
10) The drawing(s) filed on is	/are a) \square accepted or b) \square objected to by the Examiner.
Applicant may not request that any objection to t	he drawing(s) be held in abeyance. See 37 CFR 1.85(a).
11) 💢 The proposed drawing correction filed on	by 17, 2002 is: a) \square approved b) \square disapproved by the Examiner.
If approved, corrected drawings are required in re	ply to this Office action.
12) The oath or declaration is objected to by the Ex	caminer.
Priority under 35 U.S.C. §§ 119 and 120	
13) 🗓 Acknowledgement is made of a claim for foreign	n priority under 35 U.S.C. § 119(a)-(d) or (f).
a) □ All b) □ Some* c) ☒ None of:	
1. X Certified copies of the priority documents	have been received.
2. Certified copies of the priority documents	have been received in Application No
application from the International E	
*See the attached detailed Office action for a list of	·
14) Acknowledgement is made of a claim for dome	
a) U The translation of the foreign language provis	
	estic priority under 35 U.S.C. §§ 120 and/or 121.
Attachment(s)	u □ 'a
1) Notice of References Cited (PTO-892) 2) Notice of Proftsperson's Retart Province Review (PTO 048)	4) Interview Summary (PTO-413) Paper No(s).
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s).	5) Notice of Informal Patent Application (PTO-152) 6) Other:
	-, <u> </u>

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DETAILED ACTION

1. This office action, in response to the amendment filed 5/17/2002, is a final office action.

Response to Arguments

- 2. The rejections of the claims under 35 USC 112, second paragraph are withdrawn.
- 3. A certified copy of the priority document still has not been received.
- 4. Applicant states the previous office action did not include an examiner initialed copy of PTO-1449, which was submitted as part of an IDS on 3/2/1999. This IDS has not been received and entered in the file. Applicant must re-submit the IDS for it to be considered.
- 5. Applicant's arguments filed 5/17/2002 have been fully considered but they are not persuasive. The combination of Standard Telephones and Cables Public Limited Company in view of Fukasawa et al discloses the signal to be transmitted is modulated by a spreading signal and the signal which is received in the receiver is an RF signal. Therefore, the signal is mixed with a spreading code which is also an RF sub carrier. This modulation is performed in the same manner as recited in claim 35. The rejections to new claim 28-42 are stated below.

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Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 28-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Standard Telephones and Cables Public Limited Company (GB 2 125 253 A) in view of Fukasawa et al (US 5,715,521).

Regarding claims 28, 30, 32, 35-38, 40 and 41, Standard Telephones and Cables Public Limited Company [Standard] discloses a method of transferring an electrical signal from a first terminal on an optical fiber to a second terminal. An electrical signal is spread using CDMA (column 1, lines 37-50). The modulation technique used is sometimes called pseudo-noise modulation at the transmitter a modulated RF carrier is used (column 1, lines 51-62). The physical transmission path is an optical fiber and the signal is transmitted on this optical fiber (column 3, lines 9-11). At the receiver, the incoming RF signal is passed through an identical balance modulator driven from an identical code generator (column 2, lines 79-93). Prior to the demodulation step, the optical signal will be converted back to an electrical signal so the demodulation can take place. The step of demodulation, demodulates the signal and despreads the signal to recover the original electrical signal in the receiver.

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Standard does not disclose the step of adding a control signal to the modulated electrical signal before transmission of the signal. Fukasawa discloses adding a control signal to the modulated signal before transmission (figure 1 and column 2, line 51 to column 3, line 7). It would have been obvious for one of ordinary skill in the art at the time of the invention to combine the step of adding a control signal to the modulated signal to the transmission and receiving system of Standard. The control signal is a synchronization signal which helps to ensure proper synchronization of the transmitted signal with the transmission and receiving system. The synchronization signal will be extracted at the receiver to ensure the synchronization will be maintained.

Regarding claims 29, 31, 33, 39 and 42, Fukasawa discloses the synchronization signal generator outputs a base band signal (column 3, lines 35-39) and the base band signal is all that is desired. Therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention to remove all other unnecessary components of the signal to save on processing time and to remove noise.

Regarding claims 34, the above combination does not disclose the control signal is modulated using TDMA. However is would have been obvious for one of ordinary skill in the art at the time of the invention to use TDMA to modulate the control signal. It is advantageous to reserve a time slot for the control information because it will be easier to extract the synchronization information in the receiver than having to

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despread the signal to extract the synchronization information and then despread the signal again to extract the data. The circuitry will be minimized by not requiring the components to despread the signal the second time.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

Any response to this final action should be mailed to:

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Box AF

Commissioner of Patents and Trademarks Washington, D.C. 20231

or faxed to:

(703) 872-9314, (for formal communications; please mark "EXPEDITED PROCEDURE" or for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Burd, whose telephone number is (703) 308-7034. The Examiner can normally be reached on Monday-Thursday from 9:00 AM - 5:00 PM. The examiner can also be reached on alternate Friday.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3800.

Kevin M. Burd

Kevin M Bund

PATENT EXAMINER

July 14, 2002

CHI PHAM

SUPERVISORY PATENT EXAMINER

TECHNOLOGY CENTER 2600 -